

**DOCKETED**

<b>Docket Number:</b>	19-AAER-02
<b>Project Title:</b>	Replacement Pool Pump Motors
<b>TN #:</b>	232150
<b>Document Title:</b>	Notice of Proposed Action for Dedicated-Purpose Pool Pumps and Replacement Dedicated-Purpose Pool Pump Motors
<b>Description:</b>	Tuesday, April 7, 2020 at 10:00 a.m.
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**CALIFORNIA ENERGY COMMISSION**

1516 Ninth Street  
Sacramento, California 95814

Main website: [www.energy.ca.gov](http://www.energy.ca.gov)  
CEC-57 (Revised 1/19)

**NOTICE OF PROPOSED ACTION**

Title 20. Public Utilities and Energy  
Division 2. State Energy Resources Conservation and Development Commission  
Chapter 4. Energy Conservation  
Article 4. Appliance Efficiency Regulations  
Sections 1601-1609

Dedicated-Purpose Pool Pumps and  
Replacement Dedicated-Purpose Pool Pump Motors  
Docket No. 19-AAER-02  
Notice Published on February 21, 2020

**INTRODUCTION**

The California Energy Commission (CEC) proposes to adopt regulations related to replacement dedicated-purpose pool pump motors (RDPPPM) and dedicated-purpose pool pumps (DPPP) after considering all comments, objections, and recommendations, regarding the proposed action.

**PUBLIC HEARING**

The CEC staff will hold a public hearing for the proposed regulations on the following date and time. Interested persons, or his or her authorized representative, may present oral and written statements, arguments, or contentions relevant to the proposed regulations at the hearing. *The record for this hearing will be kept open until every person has had an opportunity to provide comment. A person may provide comment in person, online, or by phone via Webex.*

**Tuesday, April 7, 2020**  
Warren-Alquist State Energy Building  
1516 9th Street  
Sacramento, CA 95814  
First Floor, Rosenfeld Hearing Room  
10:00 a.m. (Pacific Time)  
(Wheelchair accessible)

Audio for the hearing will be broadcast over the internet. Details regarding the CEC's [webcast](https://energy.webex.com/ec) can be found at <https://energy.webex.com/ec>.

If you have a disability and require assistance to participate in the hearing, please contact [Yolanda Rushin](mailto:Yolanda.Rushin@energy.ca.gov) at [Yolanda.Rushin@energy.ca.gov](mailto:Yolanda.Rushin@energy.ca.gov), or (916) 654-4310, at least five days in advance.

## **WRITTEN COMMENT PERIOD**

You may submit written comments to the CEC for consideration on or prior to April 6, 2020. The CEC appreciates receiving written comments at the earliest possible date.

Please submit comments using the CEC's e-commenting feature by going to the [CEC's Replacement Pool Pump Motor webpage](https://www.energy.ca.gov/appliances/2019-AAER-02/) found at <https://www.energy.ca.gov/appliances/2019-AAER-02/>, Docket Number 19-AAER-02, then select the "Submit e-comment" link. A full name, e-mail address, comment title, and either a comment or an attached document (.doc, .docx, or .pdf format) is mandatory. After a challenge-response test used by the system to ensure that responses are generated by a human user, click on "Agree & Submit Your Comment" to submit the comment to the CEC's Docket Unit.

Please note that written comments, attachments, and associated contact information included within the written comments and attachments (e.g., your address, phone, email, etc.) become part of the viewable public record.

You are encouraged to use the electronic filing system, described above, to submit comments. All written comments submitted prior to the hearing must be submitted to the docket. If you are unable to submit electronically, a paper copy of your comments may be sent to:

Docket Unit  
California Energy Commission  
Docket No. 19-AAER-02  
1516 9th Street, MS-4  
Sacramento, CA 95814  
Telephone: (916) 654-5076

Or by [email](mailto:docket@energy.ca.gov) to [docket@energy.ca.gov](mailto:docket@energy.ca.gov).  
Or fax them to Dockets at (916) 654-4354.

## **PUBLIC ADVISOR**

The Public Advisor is available to assist any person who wishes to participate in this proceeding. For assistance from the Public Advisor's Office, please call (916) 654-4489 or toll-free in California at (800) 822-6228, or [advisor@energy.ca.gov](mailto:advisor@energy.ca.gov).

## **NEWS MEDIA INQUIRIES**

Direct news media inquiries to the Media and Public Communications Office at (916) 654-4989, or by [email](mailto:mediaoffice@energy.ca.gov) at [mediaoffice@energy.ca.gov](mailto:mediaoffice@energy.ca.gov).

## **STATUTORY AUTHORITY AND REFERENCE**

Public Resources Code Sections 25213, 25218(e), and 25402(a)-(c) authorize the CEC to adopt rules or regulations, as necessary, to implement, interpret, and make specific Public Resources Code Sections 25402(a)-(c)(f) and 25216.5(d).

## **INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW**

The Warren-Alquist Act establishes the CEC as California's primary energy policy and planning agency. Sections 25213, 25218(e), and 25402(a)-(c)(f) of the Public Resources Code mandate and/or authorize the CEC to adopt rules and regulations, as necessary, to reduce the inefficient consumption of energy and water by prescribing efficiency standards, facilitating the deployment of flexible demand technologies, and implementing other cost-effective measures for appliances whose use requires a significant amount of energy or water statewide.

One of the ways the CEC satisfies this requirement is through the Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601-1609), which contain definitions, test procedures, efficiency standards, and marking and reporting requirements for state and federally regulated appliances. Further, the regulations require that manufacturers of covered appliances certify to the CEC that their products meet all applicable state and federal appliance efficiency regulations before their products can be included in the CEC's database of appliances approved to be sold or offered for sale within California.

In 2004, the CEC adopted standards for residential pool pumps and motors, which included a prohibition on inefficient split-phase or capacitor-start induction-run electric motors and a requirement that all pumps and motors that have a total of one horsepower or greater provide at least two-speed operation and controllers. The 2004 standards prohibited split-phase or capacitor-start induction motors effective in January 2006, and the two-speed requirements for pool pump motors with a total horsepower of one or greater took effect in January 2008.

In 2008, the CEC revised the 2004 standards to include a requirement that motors with a total horsepower of one or greater, manufactured after January 2010, shall be capable of at least two speeds. The scope of the regulation was expanded to include replacement residential pool pump motors.

In January 2017, the U.S. Department of Energy (DOE) released a Direct Final Rule establishing energy efficiency standards for DPPP published on May 26, 2017. These new DPPP standards will apply to self-priming pool pumps, non-self-priming pool pumps, pressure cleaner booster pumps, and integral pool pumps, and will take effect nationally on July 19, 2021.

On August 7, 2017, the DOE issued a Final Rule for the test procedure for DPPP. The effective date for this federal test procedure is September 6, 2017, and representations made on or after February 5, 2018, regarding the energy consumption of dedicated purpose pool pumps must be based upon results generated under this test procedure.

The federal standards, however, do not apply to RDPPPM for DPPP. There are no mandatory federal standards or test procedures for RDPPPM.

Therefore, the CEC proposes to incorporate changes to the appliance regulations to align with the DOE's new DPPP standards and test procedures published in the Federal Register and effective nationally.

In addition, the CEC is proposing standards for replacement pool pump motors sold separately from the pumps as replacements. The standards for these RDPPPM would take effect on July 19, 2021 to coincide with the DOE rule for DPPP standards. The proposed regulations provide definitions, test procedures, reporting requirements, and efficiency standards for RDPPPM five total horsepower or less that are not waterfall pumps motors, rigid spa pump motors, or three-phase motors sold without an inverter.

### **Difference from existing comparable federal regulation or statute**

In January 2017, the DOE released a Direct Final Rule establishing energy efficiency standards for DPPP, published on May 26, 2017. These new DPPP standards will take effect nationally on July 19, 2021. The CEC is proposing to incorporate changes to the appliance regulations to align with the new DOE standards and test procedures for DPPP.

On August 7, 2017, the DOE issued a Final Rule for the test procedure for DPPP. The effective date for this federal test procedure is September 6, 2017, and representations made on or after February 5, 2018, regarding the energy consumption of dedicated purpose pool pumps must be based upon results generated under this test procedure.

### **Broad objectives of the regulations and the specific benefits anticipated by the proposed amendments**

The broad objective of the regulations is to increase energy efficiency savings in the state by carrying out our statutory mandate to save energy by memorializing the federal standards for DPPP and providing statewide standards for RDPPPM in the appliance efficiency regulations. The proposed regulations seek to incorporate changes to the appliance regulations to align with the DOE standards and test procedures for DPPP. In addition, the CEC is proposing to adopt the test method for RDPPPM provided in CSA 747-2009 (RA2014), *Energy efficiency test method for small motors*. The proposed test method is for all types of small motors and allows for multiple motor speeds. The CEC proposes minimum motor efficiencies for RDPPPM 5.0 total horsepower or less. The CEC proposes an additional prescriptive variable-speed motor requirement for RDPPPM from 0.5 to 5.0 total horsepower. The RDPPPM below 0.5 total horsepower will not be required to be variable speed.

The specific benefits of the proposed regulations would be cost savings to the consumer, lower statewide energy use, and lower greenhouse gas emissions from lower energy use. The proposed regulations would save approximately 62 gigawatt-hours the first year the standards are in effect. By the year that stock turns over in 2029, the proposed standards would have an annual savings of about 451 gigawatt-

hours, which equates to roughly \$82 million in annual savings to California businesses and individuals.

### **Determination of inconsistency or incompatibility with existing state regulations**

The CEC has conducted an evaluation for any other regulations in this topic area and has determined the proposed regulations would not prevent compliance with existing state regulations.

The 2019 California Building Code, Title 24, Part 2, sets standards to regulate the construction and operation of in-ground public swimming pools.

California Building Code, Title 24, Part 6 regulates residential in-ground and aboveground swimming pools and spas. The requirements control the design of new pools and the significant retrofit of existing in-ground public swimming pools, and residential in-ground and aboveground swimming pools and spas to ensure safe and energy-efficient pools and maintenance. The regulations control the placement of pool inlets and outlets, skimmers and drains, pipe sizing, and the use of pipe elbows.

Therefore, the CEC has determined that the proposed regulations are neither inconsistent nor incompatible with existing state regulations.

### **DOCUMENTS INCORPORATED BY REFERENCE**

The CEC proposes to incorporate by reference the following documents:

- NSF/ANSI 50-2015. *Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities.*
- UL 1081-2016. (October 21, 2016). *Standard for Swimming Pool Pumps, Filters, and Chlorinators.*
- Canadian Standards Association (CSA) C747-09 (reaffirmed 2014). *Energy efficiency test methods for small motors.*
- C.F.R., Title 10 Section 431.464(b), Appendix C to subpart Y of part 431, *Uniform Test Method for the Measurement of Energy Efficiency of Dedicated-Purpose Pool Pumps.*

All the documents are available for review at the Energy Commission located at 1516 Ninth Street, Sacramento, California 95814.

Any document that is not copyrighted will be available on the [CEC's replacement pool pump motor website](https://www.energy.ca.gov/appliances/2019-AAER-02) found at <https://www.energy.ca.gov/appliances/2019-AAER-02>

### **MANDATED BY FEDERAL LAW OR REGULATIONS**

None

### **OTHER STATUTORY REQUIREMENTS**

None

## **FISCAL IMPACTS**

The CEC has made the following initial determinations:

- The mandate on local agencies and school districts: None
- The cost to any local agency or school district requiring reimbursement pursuant to 17500 et seq: None
- Cost or savings to any state agency: None
- Non-discretionary cost or savings imposed upon local agencies: None
- Cost or savings in federal funding to the state: None

## **SIGNIFICANT EFFECT ON HOUSING COSTS**

None

## **SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS, INCLUDING ABILITY OF CALIFORNIA BUSINESSES TO COMPETE WITH BUSINESSES IN OTHER STATES**

The CEC estimates that approximately 600 California businesses may be impacted by the regulations. However, these regulations are not likely to result in a significant adverse economic impact on any business.

The proposed regulations adopt the federal standards for DPPP and require technically achievable energy efficiency improvements be made to RDPPPM. The proposed regulations do not create the need for a new, non-existent good or service. Instead, they require the improvement of existing goods in the market. The economic impact on any retailers and distributors is expected to be small compared to the total sales of these entities and insufficient to have an adverse economic impact affecting business. There are no manufacturers of RDPPPM located in California and shipments and sales of RDPPPM are not expected to change significantly because of the proposed regulations.

While the efficiency standards have an initial increased incremental cost for the improved efficiency, the CEC assumes that manufacturers will pass the incremental cost to improve the efficiency onto the distributors and retailers, which will then pass on the cost to consumers. However, the increased efficiency will result in lower utility bills through reduced energy consumption. The savings from the lower utility bills over the lifetime of the more efficient appliance will exceed the incremental costs of improvement, resulting in overall economic savings.

Under the appliance efficiency regulations, retailers are responsible for ensuring that the regulated products they sell are certified to the CEC, and appear in the CEC's Modernized Appliance Efficiency Database System (MAEDbS) before they are sold or offered for sale in California. Because some RDPPPM are newly covered products, the CEC assumes that retailers will experience some additional costs associated with

checking MAEDbS to ensure that the products they sell are certified to the CEC, appear in the MAEDbS, and are therefore compliant and lawful to sell in the state.

Some retailers may choose to incur additional costs if they rebrand an appliance not certified to MAEDbS and wish to sell it in California. These retailers are required to certify the appliances to California. Therefore, they will incur costs associated with reporting to the MAEDbs.

Sellers of electricity, both retail and wholesale, may experience slightly reduced sales of electricity due to the proposed standard. However, any reduction in sales is small compared to the total electricity sales of these entities and therefore negligible.

## **THE ECONOMIC IMPACT ANALYSIS/ASSESSMENT**

The CEC concludes that: (1) the proposal may create jobs within California, (2) it's unlikely the proposal will eliminate jobs within California, (3) it's unlikely the proposal will create new businesses in California, (4) it's unlikely the proposal will eliminate existing businesses within California, (5) it's unlikely the proposal will result in the expansion of businesses currently doing business within the state.

Benefit of the Proposed Action: The proposed regulations would result in cost savings to the consumer, lower statewide energy use, and lower greenhouse gas emissions from the lower energy use. The proposed regulations would save approximately 62 gigawatt-hours the first year the standards are in effect. By the year that stock turns over in 2029, the proposed standards would have an annual savings of about 451 gigawatt-hours, which equates to roughly \$82 million in annual savings to California businesses and individuals.

The proposed regulations will have a significant positive impact on the environment through energy efficiency gains and avoiding GHG emissions and criteria pollutant emissions associated with the generation of electricity.

## **COST IMPACTS ON REPRESENTATIVE PERSON OR BUSINESS**

The CEC is not aware of any significant cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Pool owners that purchase RDPPPM—including individuals, businesses and small businesses—will save money from the lower utility bills over the seven-year lifetime of the more efficient RDPPPM. The initial incremental cost increase is \$389 to \$424 per motor. But this initial cost increase will be recovered in less than two years by energy savings, which will then exceed initial costs resulting in overall economic savings over the life of the product.

The businesses involved in distribution and sales of RDPPPM may pay increased wholesale purchase prices due to the proposed standards; however, the CEC assumes these costs are entirely passed on to the end consumer. So there are no direct economic impacts to these businesses. Some retailers may choose to incur additional costs if they rebrand an appliance not certified to MAEDbS and wish to sell it

in California. These retailers will incur costs associated with certifying the appliances to California, and with reporting to the MAEDbS.

## **BUSINESS REPORT**

Although the proposed standards impose a new data reporting requirement on manufacturers of RDPPPM, none of these manufacturers are located in California. As such, there will be no reporting costs for a California business due to the proposed regulations. However, some retailers may choose to stand in as manufacturers when they rebrand a product and take on the manufacturer's certification burden for that RDPPPM.

State law (Public Resources Code Section 25402(c)(1)) requires manufacturers to certify to the CEC that their appliances comply with the applicable energy efficiency standards before they are sold or offered for sale in the state. The Appliance Efficiency Regulations require manufacturers to provide specified information for this purpose to the MAEDbS. MAEDbS is used by manufacturers and maintained by the CEC to list the appliances authorized to be sold or offered for sale in California. This is necessary to help the CEC and consumers verify compliance with applicable federal and state efficiency standards. Some retailers may choose to act as a manufacturer when they rebrand a product and assume the certification burden for that pool pump model.

It is necessary for the health, safety, or welfare of the people of the state that these regulations, which require a report, apply to businesses.

## **SMALL BUSINESS**

The CEC estimates that 60 retailers and distributors impacted are small businesses in California. The CEC is not aware of any significant cost impacts that a small business, as defined in Government Code Section 11346.3(b)(4)(B), would incur in reasonable compliance with the proposed action. The initial and ongoing costs to California small businesses are the same as the cost for a typical business.

The small businesses involved in the distribution and sales of RDPPPM may experience increased wholesale purchase prices due to the proposed standards. However, the CEC assumes these costs are entirely passed along to the end consumer so that there are no direct economic impacts of the proposed standards to these businesses.

## **CONSIDERATION OF ALTERNATIVES**

In accordance with Government Code Section 11346.5, subdivision (a)(13), the Commission must determine that no reasonable alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the action is proposed; would be as effective and less burdensome to affected private persons than the proposed action; or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

The CEC invites interested persons to present statements or arguments concerning alternatives to the proposed regulations at the scheduled hearing or during the written comment period.

## **CONTACT PERSON**

Please direct inquiries concerning all aspects of the rulemaking process, including requests for copies of the proposed text (express terms), the initial statement of reasons (ISOR), any modified version of the regulations, the substance of the proposed regulations, or any other information upon which the rulemaking is based, to:

Corrine Fishman  
Regulations Manager, Efficiency Division  
1516 Ninth Street  
Sacramento, CA 95814-5512  
(916) 654-4976  
[corrine.fishman@energy.ca.gov](mailto:corrine.fishman@energy.ca.gov)

If Corrine Fishman is unavailable, you may contact [Sean Steffensen](mailto:Sean.Steffensen@energy.ca.gov) at Sean.Steffensen@energy.ca.gov or (916) 651-2908.

## **COPIES OF THE INITIAL STATEMENT OF REASONS, THE EXPRESS TERMS, AND RULEMAKING FILE**

The CEC will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at its office at the above address. As of the publication date of this notice in the Notice Register, the rulemaking file consists of this notice, the express terms, the ISOR, documents incorporated by reference, and documents relied upon. Copies may be obtained by contacting Corrine Fishman at the address or phone number listed above or accessed through the [CEC's replacement pool pump motor website](https://www.energy.ca.gov/appliances/2019-AAER-02/) found at <https://www.energy.ca.gov/appliances/2019-AAER-02/>.

## **AVAILABILITY OF SUBSTANTIAL CHANGES TO ORIGINAL PROPOSAL FOR AT LEAST 15 DAYS PRIOR TO AGENCY ADOPTION/REPEAL/AMENDMENT OF RESULTING REGULATIONS**

Participants should be aware that any of the proposed regulations could be substantively changed as a result of public comment, staff recommendation, or recommendations from commissioners. Moreover, changes to the proposed regulations not indicated in the express terms could be considered if they improve the clarity or effectiveness of the regulations. If the CEC considers changes to the proposed regulations pursuant to Government Code Section 11346.8, a full copy of the text will be available for review at least 15 days prior to the date on which the CEC adopts or amends the resulting regulations.

## **COPY OF THE FINAL STATEMENT OF REASONS**

At the conclusion of the rulemaking, persons may obtain a copy of the Final Statement of Reasons (FSOR), once prepared, by visiting the [CEC's replacement pool pump motor website](https://www.energy.ca.gov/appliances/2019-AAER-02) found at <https://www.energy.ca.gov/appliances/2019-AAER-02> or contacting the contact person above.

## **AVAILABILITY OF DOCUMENTS ON THE INTERNET**

The CEC maintains a website in order to facilitate public access to documents prepared and considered as part of this rulemaking proceeding. Documents prepared by the CEC for this rulemaking, including this Notice of Proposed Action, the express terms, and the ISOR have been posted on the [CEC's replacement pool pump motor website](https://www.energy.ca.gov/appliances/2019-AAER-02) found at <https://www.energy.ca.gov/appliances/2019-AAER-02>.